WHAT IS CLAIMED IS:

- A recording apparatus of a helical scan system,
 comprising:
- a first video head which records video signals on a magnetic tape when a running speed of the magnetic tape is a standard speed; and
- a second video head which records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/N of the standard speed, N being an integer larger than 3.
- 2. The recording apparatus according to claim 1, wherein the value of N is 5.
- 3. The recording apparatus according to claim 1, wherein the second video head records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed.
- 4. The recording apparatus according to claim 2, wherein the second video head records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed.
- 5. The recording apparatus according to claim 3, wherein the value of N is 6.
 - 6. The recording apparatus according to claim 3,

wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed.

- 7. The recording apparatus according to claim 4, wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed.
- 8. The recording apparatus according to claim 5, wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed.
- 9. A recording apparatus of a helical scan system, comprising:
- a switch which switches between a first recording mode in which video signals are recorded on a tape at a standard track pitch, a second recording mode in which video signals are recorded on the tape at a track pitch equal to approximately 1/3 of the standard track pitch, and a third recording mode in which video signals are recorded on the tape at a track pitch equal to approximately 1/5 of the standard track pitch.
 - 10. A recording apparatus of a helical scan system,

comprising:

first and second video heads which record video signals on a magnetic tape; and

a controller which controls the first and second video heads so that the first video head records video signals at a standard track pitch, and the second video head records video signals at least one of at a track pitch equal to approximately 1/3 and 1/5 of the standard track pitch.

- 11. The recording apparatus according to claim 10, wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.
- 12. A recording apparatus of a helical scan system, comprising:

first and second video heads which record video signals on a magnetic tape;

an audio head which records audio signals on a magnetic tape; and

a switch which switches between a first recording mode in which video and audio signals are recorded by the first video head and the audio head at a standard track pitch, a second recording mode in which video and audio signals are recorded by the first video head and the audio head at a track pitch equal to approximately 1/3 of the standard track pitch, and a third recording mode in which video and audio signals are recorded by the first video head and the audio head at a track pitch equal to approximately 1/5 of the standard track pitch.

13. A reproducing apparatus of a helical scan system, comprising:

first and second video heads which reproduce video signals from a magnetic tape; and

a switch which switches the first and second video heads so that the first video head reproduces video signals recorded on the magnetic tape at a standard track pitch, and the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/N of the standard track pitch, N being an integer larger than 3.

- 14. The reproducing apparatus according to claim 13, wherein the value of N is 5.
- 15. The reproducing apparatus according to claim 13, wherein the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/3 of the standard track pitch.
- 16. The reproducing apparatus according to claim 14, wherein the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/3 of the standard track pitch.
- 17. The reproducing apparatus according to claim 15, wherein the value of N is 6.
 - 18. The reproducing apparatus according to claim 13,

wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.

- 19. The reproducing apparatus according to claim 14, wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.
- 20. The reproducing apparatus according to claim 15, wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.
- 21. The reproducing apparatus according to claim 16, wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.
- 22. The reproducing apparatus according to claim 17, wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.
- 23. A reproducing apparatus of a helical scan system, comprising:
- a first video head which reproduces video signals recorded on a magnetic tape at a standard track pitch; and
- a second video head which reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/5 of the standard track pitch.
 - 24. The reproducing apparatus according to claim 23,

wherein the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/3 of the standard track pitch.

- 25. The reproducing apparatus according to claim 23, wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch.
- 26. A recording/reproducing apparatus of a helical scan system for recording/reproducing a video signal on/from a magnetic tape, comprising:
- a first head which records/reproduces á video signal at a time of a standard play mode in which a running speed of the magnetic tape is a standard speed; and
- a second head which records/reproduces a video signal at a time of a 3-ple play mode in which the running speed of the magnetic tape is approximately 1/3 of the standard speed and at a time of N-ple play mode in which the running speed of the magnetic tape is approximately 1/N of the standard speed, N being an integer larger than 3.
- 27. The recording/reproducing apparatus according to claim 26, wherein the value of N is 5.
- 28. The recording/reproducing apparatus according to claim 26, wherein the value of N is 6.
 - 29. The recording apparatus according to claim 26,

wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode.

- 30. The recording apparatus according to claim 27, wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode.
- 31. The recording apparatus according to claim 28, wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode.

ABSTRACT OF THE DISCLOSURE

A recording apparatus of a helical scan system, including a first video head which records video signals on a magnetic tape when a running speed of the magnetic tape is a standard speed and a second video head which records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/N of the standard speed, N being an integer larger than 3.